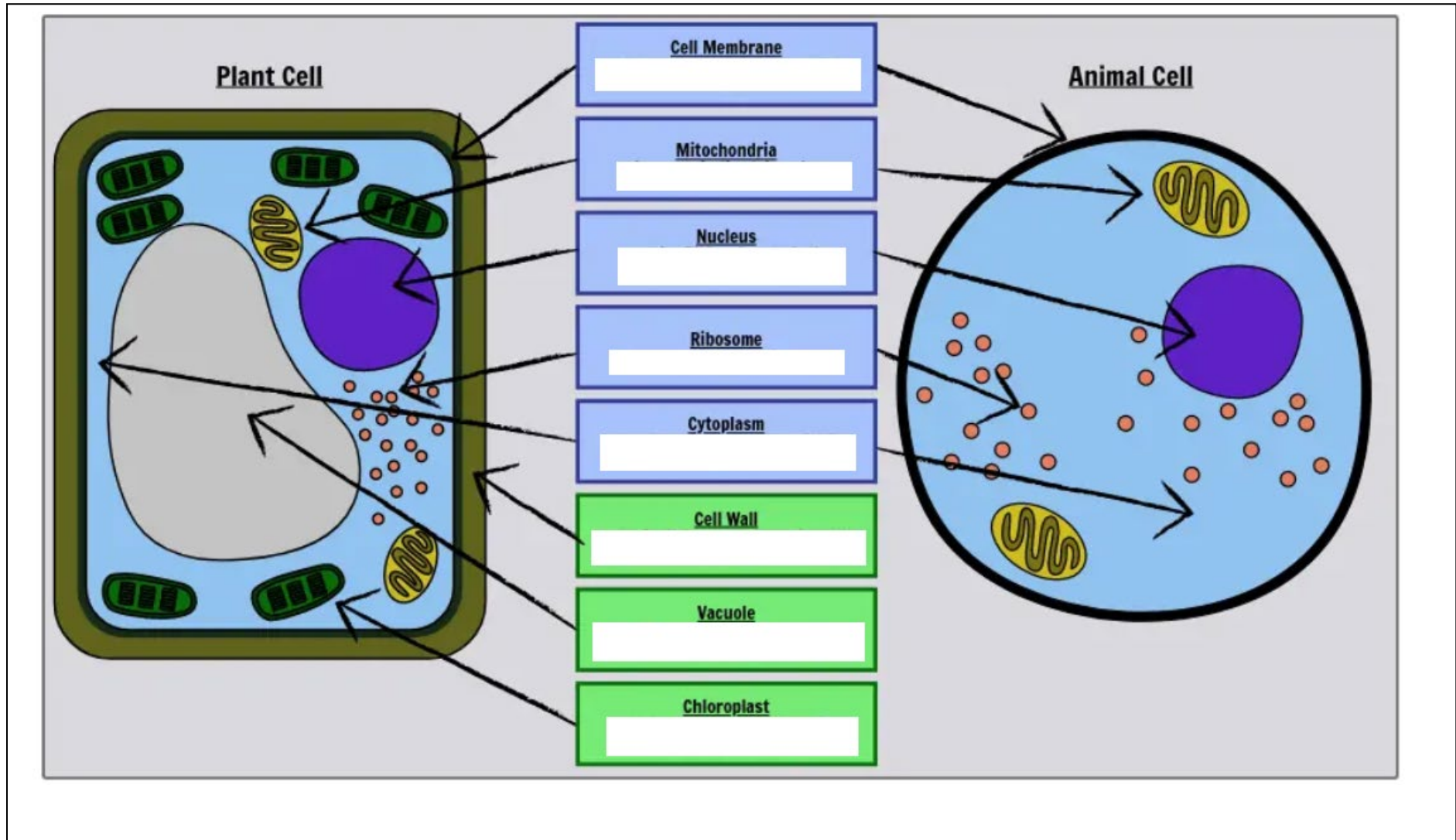


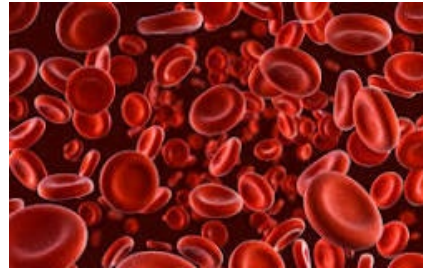
Match the function with the organelle.



- a. Controls what comes into the cell and what leaves the cell
- b. Produces glucose using the sun's energy.
- c. Made of cellulose and provides structure to the cell
- d. Burns glucose in oxygen to release energy.
- e. The solution that all organelles are in.
- f. The control centre of cell.
- g. Produces proteins using genetic code.
- h. Is filled with water and gives the cell firm.

1. Red blood cell
Form

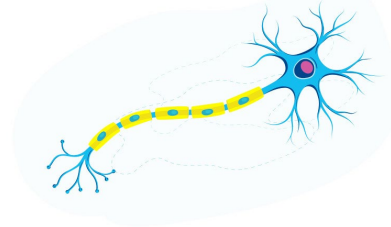
Function



Red blood cell

2. Red blood cell
Form

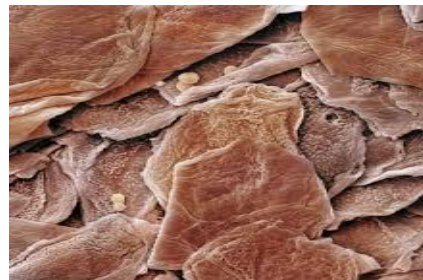
Function



Nerve cell

3. Skin cell
Form

Function



Skin cell

Year 8 Science – Research Task: Exploring the World of Cells

Part 1: Different Types of Cells (15 mins)

Choose TWO of the following cell types to research:

- Red blood cell
- Nerve cell
- Muscle cell
- Root hair cell
- Ciliated cell
- White blood cell

For each, answer the following questions:

1. What is the main function of the cell?
2. Describe how the shape or structure of the cell helps it do its job.
3. Draw a simple labelled diagram of the cell.

Part 2: What Are Stem Cells? (15 mins)

Research the following questions:

1. What is a stem cell?
2. Why are stem cells special compared to other cells?
3. Where can stem cells be found in the human body?
4. How are stem cells used in medicine? Give one example of a disease or injury they may help treat.
5. What is one ethical or scientific challenge linked to stem cell research?

What to put in include in your exercise book

- Answers written clearly on lined paper or typed in a digital document.
- Diagrams of your two chosen cells with parts clearly labelled.

Tips for Research

- Use school-approved websites such as any .gov or .edu sites are acceptable as are the following three below.

- BBC Bitesize
- KidsHealth
- Science Learning Hub

- Use safe search settings and write in your own words in your exercise book.